

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A method of measuring transmission characteristics of radio channels in a radio communications system having base stations and a radio station, the radio communications system utilizing a timeslot structure in a time frame for transmitting data, the method comprising:

transmitting the data as data bursts from one of the base stations to the radio station, each ~~of the data bursts~~ ~~burst~~ having a channel measurement sequence; ~~[[,]] the one of the base stations transmitting the channel measurement sequence,~~

wherein the base stations in the radio communications system transmit each corresponding channel measurement sequence ~~sequence is transmitted~~ as a burst having a structure that is substantially identical to a structure of the data bursts, each ~~the~~ channel measurement sequence being transmitted in at least one timeslot in which no data is transmitted ~~from the one of the base stations to the radio station; and~~

wherein the base stations in the radio communications system transmit corresponding channel measurement sequences at substantially constant power levels and at substantially a same time.

2. (Canceled)

3. (Currently Amended) The method of claim 1, wherein each ~~the~~ channel measurement sequence is transmitted in a ~~the~~ middle of a burst.

4. (Currently Amended) The method of claim 1, wherein the base stations in the radio communications system are synchronized.

5. (Currently Amended) The method ~~of as claimed in~~ claim 4, wherein plural base stations transmit channel measurement sequences using cyclic correlation ~~is used for channel measurement.~~

6. (Currently Amended) The method of claim 5, wherein plural individual ~~base stations use a transmit~~ same channel measurement sequences ~~sequence.~~

7. (Currently Amended) The method of claim 6, wherein different base stations transmit the channel measurement sequences ~~sequence is transmitted~~ with [[a]] different code phases ~~phase by different base stations.~~

8. (Currently Amended) The method of claim 1, ~~wherein~~ further comprising: transmitting a channel measurement sequence and using an identifier for [[a]] the channel measurement sequence in a predetermined timeslot in the time frame ~~has an identifier.~~

9. (Currently Amended) The method of claim 8, wherein ~~a same~~ the channel measurement sequence ~~is used~~ in the predetermined timeslot ~~as is used~~ is substantially identical to channel measurement sequences in other time slots in the time frame, and wherein the method further comprises:

phase modulating modulation ~~is used in~~ the channel measurement sequence in the predetermined timeslot.

10. (Currently Amended) The method of claim 9, wherein phase modulating comprises: phase modulating the channel measurement sequence in the predetermined timeslot by 180° ~~phase modulation of the channel measurement sequence is used in the predetermined timeslot from the one time frame to a next time frame.~~

11. (Previously Presented) The method of claim 8, wherein the predetermined timeslot is a 0-th timeslot.

12. (Previously Presented) A radio communications system comprising: having a number of base stations and at least one radio station which uses the method of claim 1

plural base stations for transmitting data as data bursts to at least one radio station, each of the data bursts having a channel measurement sequence;

wherein the plural base stations transmit corresponding channel measurement sequences as bursts, each burst having a structure that is substantially identical to a structure of the data bursts;

wherein each of the plural base stations transmits a channel measurement sequence in at least one timeslot in which no data is transmitted to the at least one radio station; and

wherein the plural base stations transmit corresponding channel measurement sequences at substantially constant power levels and at substantially a same time.

13. (Currently Amended) The radio communications system of claim 12, wherein the radio communication system comprises is a TDD (time division duplex) radio communication system.

14. (Currently Amended) The radio communications system of claim 12, wherein the radio communication system comprises is a FDD (frequency division duplex) radio communication system.